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POLLUTIONS. (A PSYCHOANALYTIC STUDY.)

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Introduction.—Pollutions are a symptom, not a disease¹;* but the patients who are afflicted with this symptom raise it to such importance and make so much fuss about it that it deserves independent consideration as much as any pathogenic entity. The sufferings of those affected with this by no means uncommon condition are so real and the amount of money expended in the search for a cure is so great that the subject is of vast importance from a medical as well as from a socio-economic point of view. In spite of this the student and practitioner will look in the modern text books (e. g. Osler, Allbutt,) for a consideration of this theme in vain. And I may avouch, almost without the least fear of contradiction, that in not a single medical school in the United States is the subject ever mentioned to the students. Our Anglo-Saxon hypocrisy in the matter of morals is extended even to medical science. Because the truth about the sexual life does not coincide with the antiquated and narrow-minded views of the "moralists," the sexual life is taboo in our medical schools. This "conspiracy of silence" revenges itself most thoroly on our patients—and on ourselves. In sanctimonious England, as hidebound in its conventionality as it is rock-ribbed terrestrially, reputable physicians do not encourage sufferers from Pollutions to consult them or solicit their aid, because they regard the occurrence of emissions as a punishment for "sexual excesses" or "excessive venery." This, it must be confessed, is a step in advance of the time, not so long ago, when *Pollution* was a subject for theological, not medical, discussion,—when an emission was a sin and a manifestation of an unholy relationship with the devil. American physicians are less particular in this regard than their English confrères, but, Alas! they are taught so little about the sexual life that, even with the best intentions, they can render the sufferers from Pollutions but little assistance, and thus hundreds of thousands of dollars annually find their way into the pockets of charla-

* The figures refer to the Editor's comments.

tans and quacks. And yet Pollutions, as I shall show, is a very respectable condition—in whose acquirement old Mother Grundy plays a very important role—and deserves the careful consideration of the best practitioners of the healing art.

Synonyms.—Pollutions is variously spoken of as *Spermatorrhea*,² *Pollutio*, *Seminal Emissions*, *Spermatia*, *Incontinence*, and *Wet Dreams*. Hippocrates drew a terrifying picture of the condition under the name of *Tabes Dorsalis*! It is customary, without, however, any justification, to discuss *Diurnal Pollutions* and *Nocturnal Pollutions* as tho they were different entities.³

Definition.—“Pollution” is a very difficult term to define at this stage of our thesis. Corner, one of the most recent and sensible writers, defines it as “an involuntary discharge of semen at improper times.” Obviously this definition is open to at least three objections: it does not apply to females, contains the meaningless phrase ‘at improper times,’ and does not distinguish between organic and functional discharges. Others define it as repeated discharges of semen occurring during sleep, with or without a dream, or by day without previous sexual excitement and erection. A really satisfactory definition is impossible until we have considered the pathology or pathogeny of the condition we are dealing with.

Classification.—Under the terms *Pollutions* or *Spermatorrhea* two wholly different conditions have been described. “*Spermatorrhea*” ought to be limited to those cases in which, as a result of disease of the seminal vesicles, there is a discharge of semen during such expulsive actions as defecation, urination, laughter, coughing, etc. In these cases the expulsion of semen from its receptacles is mechanical and is not accompanied by an orgasm, [or even any sensation]. “*False Spermatorrhea*” might then be applied to a similar mechanical expulsion, while straining at stool or riding horseback, etc., of prostatic fluid, or urethral mucus and debris, as a result of disease of the prostate or of the urethral glands.⁴ The term “*Pollutions*” I would restrict to psychogenetic, unconscious, and involuntary orgasm or orgasmic sensation with or without an erection, and with or without a discharge of semen.⁵

Occurrence.—Pollutions occur almost at any age, in males as in females, except during the earliest years of infancy. Moll has heard of nocturnal pollutions occurring in children seven or eight years of age. Married people are no more immune against it than the unmarried, and heterosexuals than homosexuals and perverts. The number of persons suffering from Pollutions is simply enormous, and it is no doubt true that there is hardly a single human being who has not at some time before marriage had

Pollutions. Women, owing to their greater reticence and to their fortunate ignorance of the fictitious dire consequences of pollutions, but rarely consult physicians about them.

Frequency.—There is no limit to the frequency with which pollutions or the sensation of a pollution may occur. One of my patients, an unmarried man of thirty years of age, had hundreds of pollution-like sensations daily for months. Most continent young men average one nocturnal pollution in seven to ten days. Average bad cases have two or three nocturnal pollutions weekly. Pollutions may, however, occur nightly and even several times a night. Strange as it may sound, a man may have a pollution even while lying alongside a woman, even a woman whom he loves, and, stranger still, even in the sleep following a coitus.

Morbidity.—Owing to the fact that Pollutions occur most frequently in persons who, for various reasons, lead a life of sexual continence, the question has been raised whether pollutions are not, to some extent at least, physiological, i. e. normal and healthful. There is absolutely no question in the minds of most observers that in the continent unmarried nocturnal pollutions take the place of coitus and thus serve as a vent for the accumulated sexual substance and a relief of the sexual tension caused by the accumulation of the semen in the vesicles and libidogenous substance in the blood (Sexual Toxemia). Notwithstanding the unquestionably beneficial effects following such Pollutions Eulenburg considers all pollutions abnormal. Llalement considers them physiological only if they occurred spontaneously, during sleep, in otherwise healthy, chaste adults, and were accompanied by an erection and a voluptuous sensation. Ivan Bloch, one of the best modern authorities on sexologic matters, agrees with this view tho he regards pollutions, quite incorrectly, as a symptom or precursor of impotence.⁶ Fürbringer considers Pollutions a normal, physiological phenomenon if they do not occur more frequently than once in ten days. Loewenfeld says they are normal even if they occur as often as once a week or even once a day for a short period of continued sexual excitement, and that they are pathological if they occur once or oftener daily for a long time. Sir James Paget, as quoted by Ellis, regards even one or two emissions per week as within the limits of good health, whereas Lauder Brunton, Hammond, and others, consider more than one emission a fortnight abnormal. Moll considers emissions a normal but not satisfactory, result of celibacy. Obviously a definition that leaves out of consideration the relative sexuality of different individuals is too arbitrary and illogical to be of any scientific value. What is excessive for one individual may not be enough for another. One individual may suffer a thousand times more anguish and distress from a single pollution than another

from a lifetime of pollutions.⁷ Bloch is of the opinion that Pollutions are most apt to prove pathological if they occur before puberty, are frequently (?) repeated, occur during the day and under abnormal states of the genitals (i. e. without an erection). But in actual practice we do not find it so. Pollutions may be followed by very distressing symptoms even if they occur at night, or only seldom, or with erections, and at any age. The only rational course is to consider a Pollution pathologic only if it is followed by bad after-effects.⁸

Etiology.—Probably not a single writer on the subject fails to mention masturbation and *excessive coitus* as causes of Pollutions. What constitutes “excessive coitus” we are not told and innumerable instances of coitus repeated daily or several times daily for years, without subsequent Pollutions are ignored. That a history of masturbation can be elicited in almost any ailment afflicting individuals past the age of puberty is also ignored. The mere fact that a person suffering from Pollutions masturbated at some time of his life is no proof of an etiologic relationship between the two affections. Many inveterate masturbators never develop Pollutions. The truth of the matter is that Pollutions follow the cessation of masturbation or coitus and manifest the individual’s inability to live a life of continence. *Chronic urethritis* is constantly mentioned as a cause for Pollutions altho there is hardly any doubt in my mind that in these cases the emissions are due to the patients’ disgust with women or fear of another attack of gonorrhea, or something even worse, and to the consequent continence. *Tabes dorsalis* and *Diabetes* are also mentioned as causes of Pollutions. These diseases are no more causes of Pollutions than *chronic endocarditis*, *excessive obesity*, or any other condition that induces the invalid to refrain from coitus. *Chronic Alcoholism* is unquestionably frequently associated with Pollutions; the cause of the alcoholism is also the cause of the Pollutions. A number of writers emphasize “an irritable state of the genital apparatus,” especially “an excessively sensitive urethra,” as a cause of lascivious dreams and Pollutions; but they omit to enlighten us as to the cause of this irritability. Other local causes, e. g. subacute or chronic *colliculitis*, *gonorrhea*, *prostatitis*, *fissura ani*, *hemorrhoids*, *pruritus ani*, *lumbricoides*, etc., are also assigned etiologic importance in the production of Pollutions; unaccompanied by abstinence these local affections do not, perhaps cannot, result in emissions. A full bladder at night may be responsible for a pollution, but only if the individual’s sexual libido is not satisfied.¹⁰ A person with a full bladder who does not want—tho unconsciously—to have a pollution awakes in time to pass water or wets the bed. *Hypochondria* has been alleged to be a cause of Pollutions, but, notwithstand-

ing our ignorance of the nature and pathogeny of hypochondria, it is much more than likely that it is rather an effect of Pollutions.

Unquestionably the most common, and perhaps the only, cause of emissions, diurnal as well as nocturnal, is *sexual abstinence*. "Hard study" and "over-exertion of the brain" have been regarded as causes of emissions—an error due to a failure to consider the fact that those who are addicted to hard study and "over-exertion of the brain" are usually young men who cannot afford to consort with a puella publica or who refrain from doing so out of fear of venereal disease, or young men and women who abstain from masturbation or coitus because of ethical and moral considerations. Notwithstanding the importance of sexual abstinence Bloch does not mention it as a cause of Pollutions!"

Pathogeny.—This brings us naturally to the question of the pathogenesis of Pollutions. If it is true—and no practical psychoanalyst or unprejudiced sexologist has any doubt about it—that Pollutions inevitably follow in the wake of sexual abstinence then they must be nature's method of finding a vent for the sexual toxemia. In the histories of a large number of these patients one finds the statement that they had "never had any connections or even attempted it" or that, for various reasons (fear of venereal disease, separation from the beloved mate, lack of love for the marital partner, fear of pregnancy, etc.), they had suddenly ceased having sexual intercourse. Boys and young men begin to have nocturnal emissions when, frightened by reading scare literature published by advertising quacks or the "normal uplift" essays of ignorant would-be reformers, they cease to masturbate. Then too there is a large class of boys and girls—girls perhaps oftener than boys—who, as they get older, give up the "filthy" habit of masturbation out of shame. In all these cases the constant functioning of the sexual glands brings about a gradually increasing sexual tension, an accumulation of libidogenous substance in the blood, an irritability of the sexual centres in the spinal cord and in the brain. At night, when the individual is asleep, the repressing force—the censor—is off guard and the leashed libido breaks out in a lascivious dream. In this way the individual is relieved of his toxemia and if he is abstinent from moral or ethical considerations, he can lay the flattering unction to his soul that he is not morally culpable—because it happened in a dream. ("Sin without guilt.") This "mechanism" serves to explain only the mild—the normal, physiological—cases of Pollutions.

But there is a large—perhaps the largest—class of patients in whom pollutions are only a symptom of a psychoneurosis. In these cases we find the most complicated pictures of apprehension neurosis or obsessive neurosis.

Altho I have discussed elsewhere (*American Journal of Urology*, June, 1913, p. 315, and *American Medicine*, Dec, 1911) the subject of "Apprehension Neurosis" there will be no harm in recapitulating the causes of this extremely common form of "nervousness." Chief among these are the abrupt introduction of innocent girls and newly married young women to gross sexual experiences, coitus interruptus, coitus reservatus, coitus condomatus, masturbation, coitus under difficulties (e. g. fear of discovery), premature emissions (which is often itself the manifestation of a neurosis), the futile embraces of chaperoned or "respectable" lovers, widowhood with its enforced continence, and voluntary sexual abstinence (which is almost always due to psychic conflicts). How these physical causes of inadequate sexual gratification combine with psychic factors to bring about Apprehension Neurosis, we leave the reader to learn in the papers above referred to.

Persons suffering from psychoneuroses (Conversion Hysteria, Phobias, Obsessions) not infrequently complain, among other symptoms, of Pollutions. The pathogeny and psychic mechanism of these neuroses are too complicated to be detailed here. In these ailments certain psychic factors, e. g., repressed infantile sexual components, a homosexual tendency, a perverse tendency, etc., play the most important role in the individual's inability to gratify his libido. At night, while the patient is asleep, the repressed "complex" finds expression in a dream and the forbidden sexual craving is satisfied. In this way sexually ungratified persons, even frigid women and impotent men, satisfy their repressed desires for incest, sadism, masochism, voyeurism, exhibitionism, etc., in their dreams or in their fantasies (day dreams). A frigid woman married to a man whom she cannot love (because of an unconscious fixation on her father or brother, etc.) has a dream the latent content of which is a coitus with this father- or brother-ideal and awakes in terror after a pollution. A young man with a strong masochistic trend dreams that he is being choked by a burglar [why not by a burglaress? Editor] and awakes with an erection just after a seminal emission. Another young man, suffering from a psychoneurosis, determined to live continent until he can afford to marry a woman whom he loves, dreams of plunging a sword down his brother's throat and awakes in the morning to find that he had a pollution and, if psychoanalytically trained, realizes that his repressed heterosexual desire has reenergised his unconscious homosexual and sadistic trends. In this way any one or more of the "sexual components" may be satisfied unconsciously. Fortunate is the individual whose difficulties in heterosexuality do not land him in worse offences against morality and society, e. g., homosexuality, perversions, bestiality, pyromania, criminality, etc., who has nothing worse to reproach himself with than a dream!¹²

In the cases thus far considered the emissions occurred only during sleep; but there is a very large class of patients in whom emissions occur under the most varied circumstances while they are awake. The discharge or the sensation of a discharge comes suddenly and unexpectedly while the patient's mind is on some subject apparently not even remotely connected with the sexual or while speaking to or seeing a person of the opposite sex. One of my patients would suddenly, while speaking of some apparently innocent subject, such as the payment of rent, snatch at his penis and say "now I've had a pollution." Not infrequently, and that in some of the worst cases, a careful physical examination would show that the patient was mistaken, that he had really not had an emission, and careful questioning would show that what the patient really felt was either a *sudden twinge of pain* in some part of the urethra, or a *feeling like a flow*, or a *ticklish sensation* in the urethra, or a *pleasurable feeling of warmth* thruout the urinary canal. Some patients complain of a sudden feeling of *coldness* or "pins and needles" in the urethra.¹⁸ The nature of the particular sensation felt by different patients is determined, psychoanalytically speaking, by the particular "complex" touched upon or the intensity of the accompanying emotion.

Sadger says that fear is especially likely to evoke a ticklishness in the urethra, but I have found it accompanying pleasurable ideas. Sudden fright is very likely to cause an actual emission. There is practically no limit to the frequency with which these sensations may occur during the course of the day. Actual emissions are, of course, very much less frequent. The same patient may at one time have an emission and at another only one of the aforesaid sensations. In men the sensation of an orgasm may be accompanied with a slight discharge of mucus from the urethral glands (Cowper, Littré).

There is almost no limit to the particular circumstances under which neurotic persons may have an emission or a pollution-like sensation. Certain movements, e. g. the rocking of a railway carriage in rapid motion, the jolting of an automobile, or omnibus, the swinging of a scup, riding horseback, dancing certain steps, etc., are very apt to stimulate the sexual appetite and to terminate in an emission or in voluptuous urethral sensations. This is a partial explanation for the popularity of some of these diversions. In these cases the urethral eroticism, and the suggestiveness of the movements, combine with the stimulation of the *nervi erigentes* to bring about the pollution. The mechanical stimulation of the seminal vesicles has nothing to do with it, except in cases of genuine (organic) spermatorrhea.

Masochistic experiences, ideas and fantasies, are perhaps the

most common causes of diurnal pollutions in neurotics. Many educators have found that certain pupils court corporal punishment, especially gluteal spanking, because it gives them emissions or pleasurable genital sensations. This kind of stimulation of the individual's urethral eroticism is unquestionably an important factor in the development of a subsequent masochism. One of my patients experienced a sensation of orgasm whenever he said or heard something reflecting on his ability to get along in the world, also when he received a bill or had to pay out money, and even when he thought of the risks involved in a contemplated marriage. Anything that tended to shake his confidence in himself or that tended to depreciation of himself or that implied risk, caused a pollution-like sensation. A female hysteric who was under my care experienced vaginal thrills and discharges while reading tales of slavery, suffering, and torture—her favorite literature.

Unconscious *Sadism* or, more correctly, incompletely repressed sadism, generally spoken of as "ideal sadism" (existing in idea only), is a less frequent cause of diurnal and nocturnal pollutions. Individuals so afflicted experience orgasmic sensations at the chance sight of a bleeding wound, or on beholding corporal punishment being inflicted on another. These never commit an overt sadistic act; at the most they indulge in fantasies of causing pain to others. Any thought suggestive of suffering in others may cause a voluptuous thrill.

There are *fetichists* who can obtain sexual gratification only when their fetichistic craving is satisfied. But there is quite a large class of normal, or supposedly normal heterosexuals, who have a pollution or a pollution-like sensation,¹³ usually without an erection, on beholding, touching, or scenting, something that—unknown to themselves—has the value of a fetich to them. There are men who have an orgasm instantaneously on catching sight of a woman with large breasts, or with hair of a certain color (usually red), or with a small hand, or a small foot, or wearing a particular kind of shoe (usually high-heeled), or emitting a certain odor, etc. One of my patients, a frigid woman, experienced an orgasm (which she described as a thrilling sensation in the vagina accompanied with throbbing and moisture) whenever she beheld herself in the mirror while her hair hung over her shoulders. (Narcistic Fetichism). This woman could not pass a barbershop without experiencing a shudder and a feeling of disgust if she saw any one having his hair trimmed. Some women have orgasmic sensations on beholding men of a certain build, wearing a certain kind of shoe, etc. Stimulation of any of the erogenous zones may terminate in a pollution in persons suffering from a *psychoneurosis*.¹⁴ So too an orgasm may be brought about by anything that chances to gratify any of the

incompletely repressed *perverse* or *inverted tendencies*. Some persons have an emission when they are tickled (*cutaneous eroticism*), when they wrestle (*muscular eroticism*), when they behold a statue of a nude figure (*voyeurism*), when they hear certain musical selections, see a beautiful painting, etc., etc. Perhaps the most common causes for such orgasms and orgasmic sensations are fear and *apprehension* from whatever cause. Distress of any kind may even lead to masturbation (perhaps as a kind of unconscious consolation or return to psychic infantilism). It is not at all unusual for boys and girls beyond the age of eleven, to have emissions during the tense moments preceding an examination at school or while hurrying to finish an examination paper. Medical students have confessed to me that they have had pollutions, or had to masturbate while waiting for the examination papers. Men and women not infrequently have pollutions while sitting in a court-room in anticipation of being called to the witness-stand, or while running to catch a train which they are anxious not to miss. Pleasure-giving ideas too may evoke a pollution. I have read somewhere of a woman having a voluptuous sensation every time she received a letter, and another of my patients experienced a delightful feeling of warmth in the urethra when he spoke of anything flattering to him. In brief it may be laid down as a general rule, that all emotions may take on an erotic character when they reach a certain intensity.

Pollutions and Enuresis Nocturna or Diurna.—Not infrequently physicians, especially pediatricists, are consulted by parents because of the terrible habit their children have of wetting themselves at night and, less frequently, by day. General practitioners know that this affection, especially the nocturnal variety, is quite common even in grown up young women who are usually too much ashamed to consult a physician about it. Now and then a neurotic patient confesses to wetting herself a little very often during the day even tho there be little urine in the bladder. Careful clinical observation will show that this trouble occurs most commonly in girls, especially during periods of heightened sexual excitement, e. g. a few days before or after the menses, while attending a dance, or reading erotic literature, while witnessing a "love drama," etc. Where no organic cause for the disease exists it will always be found that the patient—even tho a young child—is suffering from urethral eroticism, that there is a hyperesthesia or a hypoesthesia of the urethra, and that the urinary discharge or dribble is really the substitute for an orgasmic emission.¹⁵ The habit invariably disappears after the patients indulge in sexual activities that satisfy their libido.¹⁶ These facts serve to explain such phenomena as the occurrence of enuresis after sudden fright, while laughing very

heartily, and at the end of an attack of hystero-epilepsy (not infrequently a masked coitus) etc.

Pollution Dreams.—From time immemorial it has been observed that nocturnal pollutions are associated with the "very obscure subject of dreams" in some of which, as Ellis says "The dreamer becomes conscious of the more or less intimate presence or contact of a person of the opposite sex." But only very few pollution dreams are of this manifestly voluptuous and sexual nature.¹⁶ Much more frequently the dreams in which emissions occur are so disguised that the manifest dream (i.e. the dream as remembered on awaking) seems to contain nothing that is even remotely suggestive of anything sexual. As a general rule the more a person struggles against his sexual impulses, the more he seeks to repress his sexual cravings, the more disguised will his dreams be, yet now and then one encounters a very respectable and moral individual who is terribly distressed at the disgustingly erotic character of his dreams—*satyriasis* in dreaming. The dreams of neurotics and of those suffering from pollutions are of the utmost importance to the psychoanalyst, for in them—and thru them—he discovers the dreamer's repressed homosexuality, perversion, fetichism, criminality, etc.¹⁷

Those who have given the subject some study have been struck by the fact that only exceptionally is a pollution dream, even if accompanied with an emission, of a pleasurable nature.¹⁸ Much more frequently the dreamer experiences emotions of a painful nature, such as apprehension, fear, terror, and even disgust. Another striking peculiarity of pollution dreams is the hitherto (I mean before the days of psychoanalysis) unexplained fact that the orgasm occurs at some apparently innocent phase of the dream. A full explanation of these phenomena would require a treatise on sexual repression and the psychology of dreams. But in general it may be said that the less neurotic a person is, the less he represses his sexual longings, the less disguised and symbolic will his dreams be, and the more likely will he be to experience pleasure in his pollution dream. And vice versa. The fear or disgust that appears in the dream does not appertain to the pollution but to some conflict latent in the dream. The dreamer is afraid of, or disgusted with, himself, his repressed desires. The fear in the dream is the expression of his conflict with his instincts. Another and important source of the painful emotion accompanying these dreams is the dreamer's sense of guilt. All that we have said above about the emotion accompanying nocturnal pollutions applies literally to diurnal pollutions.¹⁹

Pollutions and Sexual Relief.—Havelock Ellis calls attention to the fact, which he formulates as a “general rule,” that “the more vivid and voluptuous the dream, the greater the relief experienced on awakening.” This is unquestionably true, but it applies only to a very small percentage of persons having pollutions, namely those in whom the sexual abstinence is temporary, is due to physical causes (e. g. illness, absence of the beloved, etc.), and is not due to psychic conflicts. In them the accumulating sexual tension is relieved by a pollution. This explanation throws light on another observation made by Dr. Ellis: pollutions without dreams are more exhausting than others. But, in truth, there are no pollutions without dreams. What Ellis should have said was, “without remembered dreams.” The dream is forgotten because it deals with complexes which the dreamer does not wish to recall.” The exhaustion and other symptoms of depression (headache, fatigue, listlessness, etc.) are the dreamer’s reaction to the stirred up conflicts. This is very much like what Ferenczi has described as “One-Day Neurasthenia” following masturbation.

Nor can I agree with Ellis’s statement that “sexual excitement during sleep is more fatiguing than in the waking state.” There is no reason why it should be so,—except in very neurotic persons.

Accompanying Phenomena.—Pollutions not being a disease it cannot properly be said to give rise to symptoms. All honest clinicians admit that a person may enjoy perfect physical and mental health notwithstanding numerous emissions. The mere loss of seminal substance during a dream or fantasy brings no disagreeable after effects in its train if the individual’s mind is at peace, if he has not been frightened out of his wits by the infamously false literature foisted upon a stupid public by imbecile reformers, ignorant physicians, and villainous quacks.²⁰ That those who suffer from symptoms after pollutions are really suffering from fright and remorse is evident from the fact that now and then one encounters a patient who has had a pollution dream with all the sensations of an orgasm but without a discharge, or with a discharge of only a little mucus, and who nevertheless suffers all the tortures of the damned the following day. Besides, neurotic women also suffer after pollutions altho they lose no seminal substance in the discharge and may have only one such dream experience in a month. In general the symptoms accompanying pollutions are those of the particular neurosis with which the sufferer is afflicted. For a detailed statement of these the curious reader is referred to the essays above referred to or to any other psychoanalytic essays on true Neurasthenia, Hysteria, Obsessions, Phobias, etc. This

clinical picture is complicated by the occurrence of all sorts of fears and other disagreeable phenomena based upon infamous lies disseminated by dishonest and ignorant writers. Chief among these phobias are fears of gonorrhea, of syphilis, of physical and mental decay, of "degeneracy" (a favorite word with quacks and reformers), of impotence, of tuberculosis, of sterility, of loss of memory, of being a failure in life, etc. It is pitiful to hear these deluded victims of the charlatan describe their agonized self-castigation, their feeling of guiltiness, their sense of unworthiness, their suicidal broodings. They stand before the mirror to see if they are getting thin; they shun society for fear that their vice betrays itself on their face; every little *Fehlhandlung* (slip of the tongue, slip of the pen, etc.) is regarded as a certain sign of mental bankruptcy. They can't eat, can't sleep, can't play, can't work. The occurrence of an emission throws them into a panic. These symptoms are really all due to hetero-suggestion and would probably not occur had not the patients, in their early childhood been threatened with similarly disastrous consequences if they did not cease to masturbate. A patient of mine attributed the fear he associated with pollutions to the fright he experienced at the moment of the emission when he masturbated "for the first time." Excessive pollutions, like excessive masturbation and excessive coitus, do give rise to symptoms of sexual fatigue,—headache, weariness, depression, impaired memory, constipation, loss of appetite, neuralgic pains, etc. What constitutes "excessive pollutions" cannot be stated categorically. What is excessive for one may not be so for another. There is nothing in which human beings differ so much as in their sexuality.

The Discharge.—Even in males a pollution does not always mean a discharge of semen.²² In fact in cases of long-lasting and frequently-repeated pollutions the discharge consists chiefly of a thin watery mixture of urethral, prostatic or seminal mucus with some tissue detritus and a few, or no, spermatozoa, or only a few drops of urine. The discharge varies quantitatively as well as qualitatively. In some cases the discharge is very scanty, and in others it is totally wanting altho the dreamer experience all the sensations of an orgasm. The analysis of a patient's dream furnishes a clew to the explanation of these facts. The dreamer arrests the seminal discharge²³ because of a fear of losing the precious seed of life which, not infrequently, he considers a part of the spinal marrow. This is akin to a person dreaming of passing water without—because of shame and fear of punishment—actually doing so.

Prognosis.—The prospect of a cure in the ordinary case of pollutions due to voluntary abstinence is very favorable. In those

cases in which the pollutions are only one of the symptoms of a psychoneurosis the prognosis is that of the neurosis. Such idiotic statements as that "too frequent" pollutions are the most common causes of impotence or insanity, imbecility, epilepsy, etc., ought not to be permitted to disgrace a medical textbook. The pollutions and the impotence are really only different expressions of the same complexes;— what cures one will cure the other.²⁴

Treatment.—More nonsense has been written about the treatment of pollutions than about almost any other medical subject. The writings on this subject by the authorities of a former day are useful only as a source for mirth and laughter. Tissot, wholly ignorant of dream symbolism and of the sexual nature of even apparently non-sexual dreams, admonished his patients to awake the moment a libidinous idea or the image of a woman presented itself to their dreaming thoughts. Acton approved of this plan but doubted its efficacy. As unscientific as futile is the injunction to refrain from sexual thoughts, romantic (erotic) literature, from social intercourse with members of the opposite sex, etc. The very things the patient should not do if he would not add to the store of repressed matter. Some of the old writers ordered their patients to keep their dreaming thoughts pure by an effort of the will. This is quite as irrational as the modern physician's belief that a psychoneurosis is dependent upon the patient's will and that the patient can be rid of his symptoms if he will but will to be so. One might with the same hope of success, order a melancholiac to will to be cheerful.

Local treatment of one variety or another for the cure of Pollutions is resorted to almost exclusively by most physicians. Perhaps because it pays. The most common of these are cauterization of the posterior urethra, frequent astringent instillations into the urethra, prostatic massage, passing bougies into the urethra, etc. All these procedures are—when persisted in for a long time—only a form of passive masturbation and do more harm than good.²⁵ Opiate enemata at night need only be mentioned to be condemned. Physicians of a mechanical turn of mind have devised instruments for the cure of Pollutions. Trousseau had his patient go to bed with an instrument in his (the patient's) rectum so arranged that it made pressure on the seminal vesicles and mechanically prevented emissions! There have also been sold—at fancy prices—all sorts of contraptions so devised as to make constant pressure against the urethra or against the perineum and thus to prevent emissions. These are but seldom employed now,—the patients of to-day being, perhaps, more sensible than those of former days.

Some "surgeons" have gone into raptures in the praise of the "urethral ring"—a leather ring armed with four sharp prongs

(more could be added if necessary) which the patient fastened around the penis with a silk bow in such a manner that if he got an erection during the night the prongs would be driven into the flesh and would awaken the dreamer in time to prevent a discharge even if not to "check the disposition" thereto. Two of these ring instruments—adapted for males only—are pictured in Milton's book on "Spermatorrhoea" (1881). Anyone with a slight sense of humor will enjoy reading Milton's rebuttal of the charge that the use of these rings is unscientific tho he admits that patients may have emissions even with the ring on. Another ingenious mechanism devised for the cure of emissions—in males only—is an electric alarm which works on the following principle: a ring is placed around the penis in such a manner that when the penis becomes erect it completes an electric circuit and rings a small alarm bell which speedily arouses the sleeper. If the sleeper refuses to awake at the crucial moment, or is a sound sleeper, it is an easy matter to place the bell where it will wake some member of the family.

The rational treatment of Pollutions is an easy matter. In mild cases, those due to abstinence from choice or from easily ascertainable causes, common sense will tell us what to do. Luther was right when he advised that girls having sexual dreams should be married, "taking the medicine which God has given." If they cannot do this they must find other methods for sexual relief or be content with wet dreams. Young men, widowers, etc., must do likewise."

Local diseases, if there are any, must necessarily be cured; but let us not forget, as Corner says, that "The treatment of the body is a mere adjuvant to that of the mind." In the severer cases Pollutions are only a symptom of a psychoneurosis; a psychoneurosis is a psychogenetic disease; and psychic diseases can be cured only by psychic remedies. Such suggestive measures as hydrotherapy, change of scene, an ocean voyage, electricity, massage, bromides, etc., will benefit only the mildest cases. The fears of these patients must be allayed; they must be told the truth about the sexual life; they must be instructed how to prevent gonorrhoea, syphilis and chancroids; they must be taught how to prevent conception, etc. If the patients are so far gone that these measures will not cure them there is only one thing left to do; and that is—*Psychoanalysis*. How to conduct a psychoanalysis—I mean the genuine Freudian variety—is another story.

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POLLUTIONS—(A MEDICAL AND COMMON SENSE STUDY).

BY WILLIAM J. ROBINSON, M.D., New York.

Dr. Tannenbaum's paper on pollutions is so well written and contains so many things that are true that it is a pity to have it marred by so many things that are not true. The marring is due to two factors: First, to the usual narrow dogmatism of the Freudian; and second, to a very evident lack of experience in the actual treatment of pollutions.

Theoretical differences of opinion are one thing, inadequate observation or a wrong interpretation of facts is another. It is an editor's duty to give space to opinions which differ from his own. It would be a *neglect of duty* to permit statements that he knows to be wrong to go unchallenged. I would consider that I was not dealing quite fairly with my readers if I printed Dr. Tannenbaum's article without any comments:

1. The very first sentence challenges criticism: "Pollutions are a symptom, not a disease." Dr. Tannenbaum should know that in many functional disorders *the sum total of the symptoms constitutes the disease*. In some cases pollutions are the symptoms of some underlying trouble, such as an inflammation of the vesicles or the colliculus seminalis. In others no organic change whatever can be found, and *the pollutions are the disease*. Where there is an organic basis, if we succeed in stopping the pollutions the patient is not cured yet, we still have to treat the inflammation, or whatever the cause of the pollutions may be; but in very numerous cases if we succeed in stopping the pollutions we have cured the patient.

2. Pollutions are spoken of as "spermatorrhea." We know of no modern sexologist who would speak of pollutions as spermatorrhea or vice versa. The two things are entirely different. Spermatorrhea is a loss or an oozing of semen during defecation, micturition or under some excitement, but without any erection, without any orgasmic feeling, in fact without any sensation whatever. The patient may not know that he has spermatorrhea, but he always knows when he is suffering from pollutions.

3. "It is customary, *without however any justification*, to discuss diurnal pollutions and nocturnal pollutions as if they were different entities." This statement, coming from a modern physician, is certainly surprising. There is certainly a very decided justification for considering the two as separate entities. To confuse the two shows a lack of experience with either. Nocturnal pollutions may be strictly "physiologic," may occur in the

strongest, most robust man, and may be unconnected with any bad effects—in fact they may, provided they keep within limits, give the patient decided relief. This is not true of diurnal pollutions. *Diurnal pollutions are always pathologic*, and only occur in neurotic individuals or in people with diseased and atonic prostates, diseased vesicles, inflamed ejaculatory ducts, etc. While sometimes they follow excessive nocturnal pollutions, they may occur in people who either never suffered with nocturnal pollutions or had them only in a very moderate degree. I repeat, the difference between nocturnal and diurnal pollutions is not only one of degree, *it is one of kind*. The former may be “physiologic” and cease as soon as the patient gives up his continent life, while diurnal pollutions are always pathologic and may and often do continue even when the patient resumes or commences sexual relations.

4. I do not give my sanction to the use of “false spermatorrhea” to describe a discharge from the prostate or from the urethral glands. Why introduce confusing terms? Why not call a prostatic oozing—prostatorrhoea and a discharge from the urethral glands—urethrorrhoea?

5. The author's definition of pollutions is so bizarre, that it can hardly be considered seriously. To say that a pollution is an orgasm or orgasmic sensation with or *without* an erection and with or without a discharge of semen, is to muddle up the whole subject of pollutions. *The very essence of pollutions is the discharge of semen* (or of mucus—in women). *If there is no discharge then it is no pollution*. The very etymology of the word refers to the fact. If there is no discharge of semen, where does the “pollution” come in, why is a person “polluted?” An orgasmic sensation does not pollute a person. The word was and is used in its physical sense. But besides this, hopeless confusion is introduced into the very pathogenicity of the symptom-complex. If we had pollutions without a discharge of semen they would never be of that serious import that they in reality are capable of becoming when too frequently repeated. For a discharge of semen every night or several times a night is a very serious matter and may make a complete wreck of a person, even if that person is not a neurotic to start with and is not afraid of the possible injurious effect of his pollutions. This point is a very important one, and the entire article of Dr. Tannenbaum is to a great extent vitiated by his peculiar, utterly unjustifiable definition of pollutions. Naturally if every tickling in the urethra, every little sensation without any emission whatever is called a pollution, then a man may have a dozen pollutions a day without being either seriously or in any way affected by them.

6. I regret to say that here I must disagree with Dr. Tannenbaum and agree with Dr. Bloch. There are very few things in sexual matters in which Dr. Bloch is incorrect, and he is certainly quite correct in considering excessive pollutions as a symptom or precursor of impotence. Pollutions if frequently repeated, and if not properly treated, *do often result in impotence*, and not only in partial impotence but the result may be complete permanent impotence. I have seen many such cases in which no other etiologic factor could be found. That many cases of pollutions do not result in impotence is true, but that is of course no argument against some of them so resulting. Hardly anything in the world has exactly the same consequences for everybody. Indulgence in alcohol, even in excessive amounts, leaves some people untouched, but it would be silly to deny that it may and often does make a wreck of others and may lead to delirium tremens in still others.

7. This is an exaggeration. There are no such cases. But we will call it a stylistic license, and let it go at that.

8. This is a very dangerous statement, as I have shown in my book on "Sexual Impotence."* Pollutions may be pathologic even if they leave the person in a buoyant refreshed condition. To delay treating a patient for pollutions until they produce distinct and unmistakable bad after-effects is poor practice because it may be then too late. The thing to do is to prevent the pollutions from becoming such as to produce bad after-effects. The whole subject of physiologic and pathologic pollutions is so important that I take the liberty of quoting on the subject from the just mentioned book:

The conditions of normal pollutions, or "wet dreams" as they are popularly called, are as follows:

1. They must occur during sleep.
2. They must not occur with undue frequency (this point will be discussed further).
3. They must be accompanied by a strong erection.
4. They must be accompanied by an erotic dream.
5. The ejaculation must be accompanied by a voluptuous sensation.

6. And last, but not least, the pollutions must not have any debilitating or depressing effect on the patient. He must feel in the morning refreshed and buoyant as after a normal coitus.

In other words, pollutions to be designated as physiologic must have practically the characteristics of normal intercourse. As soon as they begin to deviate from the conditions which we have outlined, they begin to be pathologic, and the greater their deviation the greater their pathologic significance.

* "A Practical Treatise on the Causes, Symptoms and Treatment of Sexual Impotence and Other Sexual Disorders in Men and Women. Fifth Edition."

Pollutions that occur during waking hours or too frequently, or that are not accompanied by erections, erotic dreams or voluptuous sensations, or that leave the patient on the following day depressed, languid, unable to work or concentrate, with a dull feeling in the head or pain in the neck and spine, etc., are distinctly pathologic and must be treated energetically and without delay.

I used the term "undue frequency"; I know it is an unsatisfactory expression, one of the expressions employed when we wish to avoid specific statements. What is the proper frequency and what is undue frequency? Are we justified in establishing a normal interval, and say that any smaller interval is abnormal? We are. I am as well aware as one can be of the differences existing in the sexual spheres of different men, and nevertheless we are justified in accepting a certain criterion, a certain average. If pollutions occur not oftener than about once in two weeks, or at the very most once a week, and if they do not cause symptoms of weakness and depression they are within the limits of normal. If they occur twice a week or oftener they *are pathologic, even if they leave the person in a buoyant, refreshed condition*. For we have here a great danger, the danger of the *pollution-habit*. While there are people who can and do live for years in good health with the pollutions occurring with about the same frequency, the general tendency of pollutions, if left untreated, is to increase in frequency and to lose in intensity, and in the erotic elements, i. e., their tendency is to pass from physiologic to pathologic. And it is the part of wisdom to treat them while they are still in the former stage.

9. "Many inveterate masturbators never develop pollutions." This proves nothing. Many inveterate smokers never develop cancer of the lip, but that in some cases there is a distinct relationship between smoking and cancer of the lip or tongue cannot be denied. And besides, why should inveterate masturbators develop pollutions? As long as they masturbate there is little or no semen left in their vesicles to cause a pollution; and then inveterate masturbators may so weaken their sexual organs, may so destroy the spermatogenic power of the testicular glands as to have very little semen or libidogenous substance in their system. But there is no question that many masturbators do begin to suffer with frequent pollutions after they have given up the habit of masturbation. There can be no two sides to this question. I see such cases daily. Depending upon various factors, such as the time of commencing masturbation, the frequency of the masturbation, the general nervous constitution of the patient, etc., the masturbator has three different ends: he either does not injure

himself at all, or he injures himself only slightly and temporarily, or he injures himself irreparably. In the first instance he may begin to lead a natural sexual life without being any the worse for his masturbation, or if he breaks the habit absolutely and does not indulge he may begin to suffer with pollutions. The same is true of the second class, only in a different degree. The patient of the third class may either have injured himself to such an extent as not to be able to have any pollutions at all, because he does not generate any semen, or he may suffer from nightly pollutions or even three or four pollutions a night.

10. That abstinence is the fundamental underlying cause of pollutions goes without saying and is admitted by everybody, even by quacks of the Sylvanus Stall type, and the author is simply fighting a straw man. But that all the causes enumerated may be contributing factors in the causation of pollutions nobody who has had any extensive experience can deny.

11. Bloch needs nobody to take up the cudgels in his behalf. His reputation as one of our foremost sexologists is secure. But none the less I cannot help saying that it is rather strange to reproach Bloch with not having mentioned sexual abstinence as a cause of pollutions. The thing is so self-evident that it needs no emphasis. And at the risk of making this commentary too long, I will reproduce here a brief chapter from the above referred to book, entitled "Causes of Pollutions":

The great basic cause of pollutions is continence. As just stated, if all men lived a normal sexual life from maturity to the extinction of the sexual faculties, pollutions would be only a rare and exceptional phenomenon. We are told that pollutions are unknown among primitive tribes or among animals. But civilization, by which we mean our social-economic conditions and our moral and theologic codes, imposes very decided restrictions upon the satisfaction of the sexual impulse. A large percentage of men get married many years after attaining maturity, and many remain unmarried through life. And as the opportunities for illicit intercourse are limited and at best unsatisfactory, many men have abstinence imposed on them, voluntary or involuntary, which is often irksome, often extremely annoying and unhealthy. And as nature must find a safety valve, an outlet for the accumulated seminal secretion, as the seminal vesicles can only stand a certain amount of distention, pollution is the result. And so the broad normal cause of pollutions is continence.

But there are many factors which aggravate pollutions, increasing their frequency and persistence. First, among these causes is masturbation. Masturbation puts the genital organs

¹ Loco cit.

into an atonic condition, so that emission takes place at the slightest stimulation. Both susceptibility and irritability is increased and the resistance is lessened. Other causes are: an uncured posterior urethritis, chronic inflammation of the colliculus seminalis, patulousness of the ejaculatory ducts, and prostatitis. Rarer and incidental causes are eczema and pruritus of the anus and scrotum, fissure of the anus, alcohol, particularly beer and ale, cantharides taken for their reputed aphrosidiac effects, an overfilled stomach, a full rectum, a full bladder, an overheated room, too warm covering, *cold feet* from insufficient covering; dallying with women, reading salacious literature or witnessing obscene shows, in short keeping the mind centered on sexual subjects, is an undoubted cause.

Nor must we forget a long prepuce with accumulated smegma, balanitis, phimosis, paraphimosis, and any other inflammatory condition of the penis, or the genial adnexa.

12. The entire Freudian part of the article I will leave aside. To me it seems grotesque, but to go into an elaborate criticism of it would make this commentary longer than the original article, and I must leave the discussion of the Freudian interpretation of pollutions, masturbation, impotence, etc., for another occasion.

13. Of course if the author will insist upon speaking of a ticklish sensation, or a feeling of warmth or a sudden feeling of coldness or a feeling of pins and needles in the urethra as a pollution, then he can claim and prove anything, but this is neither scientific nor correct, and a feeling of warmth or coldness or "pins and needles" do not constitute a pollution.

14. Confusion worse confounded. The author says stimulation of any of the erogenous zones may terminate in a pollution in a person suffering from a psychoneurosis. But, my friend, stimulation of any of the erogenous zones *becomes practically masturbation*, and such stimulation may terminate in a pollution in perfectly normal and perfectly healthy persons, in persons who haven't a trace of a psychoneurosis.

15. That bed-wetting or urinary dribbling is really a substitute for an orgasmic emission is to my poor mind so grotesque, that I would like to devote a few pages to showing the utter untenability of the statement, but again I must refrain. See paragraph 12.

16. This is not true. The vast majority of pollution dreams are of a manifestly voluptuous and sexual nature. In healthy men and women they are invariably so. It is only when the pollutions become pathologic that the dreams begin to lose their sexual character, and it is this *loss of the sexual character that frequently serves as a danger signal*.

17. This is also incorrect. On the contrary, pollution dreams when accompanied by emissions are generally of a pleasurable nature. Only after they become too frequent, after the patient is weakened, in other words after they have become pathologic, the pleasurable nature of the dream is changed into an indifferent or unpleasant one. I am very careful to ask all my patients to describe the character of their dreams, and what I say is based not on theory but on actual facts, on dreams as simply related by our patients without any suggestion from our part, without being guided by "leading" questions. There is no fear and no conflict in the patient's dream. The fear and conflict make their appearance only after the patient is awake, and the degree of the fear and conflict depend upon the patient's misinformation as to the danger of pollutions or upon his neurotic condition *induced* or *intensified* by pollutions.

18. Here the author reaches the acme of absurdity. To say: "All we have said above about the emotion accompanying nocturnal pollutions, applies literally to diurnal pollutions," shows a peculiar kind of reasoning. In one case the patient is asleep and unconscious, and in the other he is fully awake and in possession of all his reasoning powers. What becomes then of the sleeping censor, of the wish-fulfilment business, etc., etc.?

19. Here again Dr. T. is wrong and the author whom he criticizes, Havelock Ellis, is right. There is no question that pollutions accompanied by a vivid and voluptuous dream are much less weakening than pollutions not accompanied by dreams. But the reason that pollutions without dreams are more exhausting than others is due not to the lack of the dream, but simply to the fact that *pollutions without dreams mean pollutions of an extreme degree*, pollutions of great frequency, pollutions in a weakened and atonic subject. The stimulation or irritation necessary to produce a pollution in such a weakened subject is so slight that it may and does occur without any dreams. To say that there are no pollutions without dreams and that we must always say "without remembered dreams" is simply Freudian nonsense. How can we know that the patient did dream when he cannot possibly remember the dream, and when it cannot possibly be brought out by any methods? Psychoanalysis may make a patient believe that he dreamed, may suggest to him a dream, but that doesn't mean that he actually did dream.

20. To say that the mere loss of seminal substance brings no disagreeable after-effects if the individual's mind is at peace, is going to dangerous extremes. That the fear of the injury done by pollutions aggravates the patient's condition is undisputed, but that pollutions very frequently repeated may in them-

selves, in a perfectly normal, non-morbid, sensible patient cause extreme exhaustion will not be disputed by anybody who is not making irresponsible sensational statements. It is the same with masturbation. There is no doubt whatever that the lurid pictures of the horrible results of masturbation cause an awful lot of injury, sometimes much more than masturbation itself. But nevertheless it remains true that a patient who masturbates daily or several times a day for several months in succession will ruin his constitution, sometimes irreparably, will become a miserable wreck even if he does not believe in the injurious effects of masturbation. To say that a procedure which will bring the patient to complete exhaustion, causing sometimes a fainting fit, etc., is devoid of injurious effects, provided the patient is not frightened, is foolish in the extreme, not to use a stronger term. Even excessive normal coitus may make a temporary "idiot" of a person, may kill a person, so why not masturbation and pollutions, if excessive? It is a good thing to knock the ignorant reformers who try to make us believe that sexual relations are a luxury without which we can do very readily if we only wish to, but it is just as bad falling into the other extreme.

22. If it is not a discharge of semen or seminal like fluid, it is not a pollution.

23. According to this statement one would think that the dreamer can arrest the seminal discharge at will. It is only in the rarest instances that a man can stop a pollution and that is only when he wakes. And it is only people who are still in the robust physiological stage that occasionally wake during pollutions. The one in whom the pollution habit is firmly established, the pollution-weakling, does not wake during a pollution. He generally wakes in the morning without any memory of anything having taken place. There is only the spot on the linen to remind him of it.

24. This statement is quite incorrect. Pollutions and impotence are not "different expressions of the same complex." There may be pollutions without impotence and there often is impotence without pollutions, and what cures one will not cure the other, our author to the contrary notwithstanding. Pollutions are a comparatively simple matter to cure, impotence requires all our resources and an inexhaustible supply of patience, and even then we are not always successful.

25. Here I fear the author shows insufficient experience in the treatment of pollutions. There is no question that the measures enumerated by him, in skilful and judicious hands, often are successful in either *completely* stopping pollutions, which is *not* a desirable thing, or in reducing them to a physiologic minimum.

26. The basic cause of pollutions being sexual abstinence, it of course stands to reason that the proper remedy is to be sought in normal sexual relations. But the thing is not quite so simple. The author himself admits in the early part of his paper that married men, men who love their wives and have normal relations with them, may have pollutions, and men may have pollutions in their sleep immediately following a coitus. So simply to give this self-evident advice is not sufficient. It is sufficient for a large number of cases, but not for all. There are very many patients suffering with pollutions who if they begin to indulge in sexual intercourse still continue to suffer with pollutions, in fact the pollutions become aggravated. Then again, you must remember that many cases with the pollution-habit are also impotent, and to advise them to have sexual relations is like advising a legless man to walk without crutches or artificial limbs. They must be treated, treated and treated. And that psychanalysis has ever cured a genuinely impotent man I have very grave doubts.

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HOW TO PREVENT AN EXCESSIVE FALL IN THE BIRTH-RATE WITHOUT INTERFERING WITH THE USE OF CONTRACEPTIVES.*

BY PROF. A. GROTJAHN, Berlin.

III.

ECONOMIC AND SOCIAL MEANS OF INCREASING THE BIRTH-RATE.

IT is society's duty to foster the will to procreate and to reduce the burdens of parenthood; the spread of information of anticonception methods no longer allows us to expect frequent childbearing as a matter of course. Fortunately there are many means within the reach of society, the state, the nation, the race, to grant prolific couples the recognition, the assistance and the encouragement they deserve.

To this day very little has been accomplished in that direction. On the contrary, our age by considering the family as a purely private institution has done much to make parenthood more burdensome and to place a premium on childlessness.

The granting of special privileges to large families is nothing new. In the 17th and 18th centuries the governments of several nations did their best to increase the birthrate by combating celibacy, taxing bachelors more heavily, disbarrring them from

* Concluded from February issue.

certain offices, restricting their inheritance rights and at the same time favoring married people by imposing on them lighter taxes, paying them bonuses upon the birth of every new child, reserving for them official positions, landgrants, etc. . . .

The present economic system saps the very foundations of the family; that the family survives at all is the best evidence of its wonderful vitality; but it can only keep up its fight for existence by reducing the number of its members. Large families are now doomed to economic and social downfall while childless ones are on the ascendancy. The prevention of conception is becoming more and more practicable at the very time when this overindividualistic, capitalistic change is taking place; and this is why this valuable conquest of progress is fraught with such terrible consequences.

We cannot prevent the use of anticonception means, and for many hygienic and eugenic reasons we wouldn't if we could; we must, therefore, grapple with the second part of the problem, that is to remove the obstacles which make parenthood too onerous.

Certain governments have already begun to favor fiscally large families and to tax more heavily the bachelors and the families which have few or no children. In certain parts of Germany, in the principality of Reuss (the elder) line and in Oldenburg bachelors' incomes are subjected to a graded overtax.

It is unfortunate, however, that the proceeds of that taxation measure revert to the state's treasury instead of being applied to the relief of large families as is done in the State of Illinois. To quote from a report to the Prussian ministry of the interior: "We should encourage early marriages by paying higher salaries to married than to single employees and the income of married officials should be taxed less heavily than those of bachelors. Also married employees should receive a higher housing allowance than bachelors, for, for one thing, married employees are as a rule more settled and more reliable than bachelors."

Hungary has since 1912 granted annual premiums to employees upon the birth of every new child; those premiums are larger for every new child and their payment is continued until the child is 16 or 24 years of age according to the father's position.

Certain communities pay a bonus to large families according to the number of children. In Charlottenburg officials or private servants with more than three children may upon application re-

ceive the following bonuses: 150 marks for four children, 300 for five, 450 for six, 600 for more than six. Workingmen with four children receive 150 marks, those with five children the equivalent of 10 per cent. of their wages not to exceed 300 marks, those with six children 15 per cent. of their salary not to exceed 450 marks; those with more than six children 20 per cent. of their wages not to exceed 600 marks. Children over sixteen are not counted in; also the indemnity ceases to be paid when the family has an income of over 9,500 marks a year.

In Schoenberg city employees with three children below sixteen years of age received a suppliment of 10 marks per month; with four children 12.50, with five children 15 marks, with six 17.50, with more than six 20 marks.

In Frankfurt, city officials receive besides their housing allowance a bonus of 8 marks for two children, of 140 for three or four, of 200 for more than four children.

In Halberstadt city employees with three or four children below fourteen receive an increase in pay of 1 mark 50, those with five or more 2 marks weekly, which sums are paid monthly to their wives.

In Strassburg single workingmen in the city's employ bear a deduction of 10 per cent. from their salaries up to the age of 25, and of 5 per cent. from 26 to 30; out of that fund an extra pay is given to fathers of families: 5 per cent for more than three children below 16, 10 per cent. for four, five or six children and 15 per cent for seven children.

This system can only be applied to people employed in steady city positions. In the case of industrial laborers likely to change their occupation frequently one must rely upon some compulsory system of insurance. But Labor insurance could be so developed that it would insure an increase in the birthrate among the strong and prevent it among those physically inferior.

The German health insurance system already favors motherhood, but to a very slight extent, and much has to be done yet in that direction.

We will have to introduce some time or other a parenthood insurance; for this only will vouchsafe large families the compensation they need, by letting the single or childless contribute to the support of those burdened with many children. The ease with which actuarial computations could be conducted would make this type of insurance simpler and more accurate than any other type. The

difficulty will consist not in establishing this new kind of insurance but in converting public opinion to a belief in its necessity.

Parenthood insurance would give to prolific parents not only material advantages but would be a step towards according them a sort of national recognition.

That recognition is accorded them to a certain extent in Belgium where fathers of families are allowed to cast an extra vote at election time.

The universal suffrage law could very well be modified to permit of such a preferential treatment, for a father could be allowed to vote as the child's proxy until the child became of age. It would be only equitable that large families made their influence felt more deeply in the community than a swarm of shiftless bachelors, for the standard-bearers of culture are not those who have passed certain examinations and climbed a few steps on the social ladder but those who have brought up the largest number of healthy children.

A regrettable cause of shortage in births is due to the existence of a class of women who would make excellent mothers, for they must before receiving their appointment undergo rigid physical examinations: government employees and teachers. Those women cannot or will not compromise their position by marrying or becoming mothers. The only way to stop the shortage due to that condition is to make salaries proportionate to the number of children and to induce early marriages by a differential treatment of single and married employees.

The prevention of conception is especially resorted to by people living in large cities, for nothing is more difficult or unpleasant than bringing up children in barracks-like tenement houses. Real estate speculation has exiled children from the land and the result has been a terrible increase among children of rickets and anemia. Unless we can replace those barracks by roomy and airy dwellings, the birthrate in cities and towns will continue to decline. Furthermore large families are not welcome in certain communities which are afraid lest such an addition to the population might mean an increase of the poor and school taxes; in 1912 the town of Solingen had to provide shelter for many families which were well able to pay rent but could not, on account of the number of their children, either keep their former quarters or secure new ones.

To remedy this condition, the town of Dessau has set apart two blocks of houses surrounded by gardens which are let to large

families only. In October 1913, eighteen families moved into those houses with their 127 children. Rents are 250 marks (62 dollars) a year but a rebate of 8 marks per child is granted to tenants; two other groups of such houses are in construction.

Agriculture is no longer capable of retaining the people in the country and furthermore large farms only employ wandering workingmen, a new danger for our population. A system of national colonization could remedy this; besides the economic advantages such a system would present, it would contribute to the preservation of a physically sound race and stem the ebb in the birthrate. The attempts made by the society for social colonization in Germany have given very encouraging results. Unfortunately this system of colonization encounters a strong opposition on the part of the neighboring communities which fear an increase in their expenses for poor relief and school maintenance.

All the measures we have suggested in order to bring about an increase in the birthrate have also the advantage of promoting the cause of national hygiene. Whatever privileges are granted to large families at the expense of the single and childless ones redound to the advantage of the mother's health and the children's health. Whatever encourages people to marry young raises a barrier against the spread of venereal disease. The housing reform that will bring the country's advantages to the city and the city's advantages to the country will not only make it easier to bring up children but satisfy many of the demands of social hygiene.

The decline of the birthrate will have at least served to promote the cause of social hygiene.

The human animal is again becoming valuable. It is not only the products of industry, but men who now enjoy the public interest. It is no longer finance and commerce which play the leading part in public discussions, but census lore, the science of human economy. The conservation of human material is a public necessity which has as its corollary the fight against all dangerous diseases, the protection of infants and the care of illegitimate children. The decline in the birthrate has detracted our attention from the superficial things of civilization and has directed it to the fundamental thing, the family.

In the future a race will only survive when, *in spite* of its knowledge of all anticonception methods, it presents a surplus of births. This must be impressed upon the mind of every human

being having attained the period of puberty; all the social and political agencies must endeavor to facilitate for every one the fulfilment of his duty to the race.

We must fight the unavoidable dangers consequent upon a regulation of the birthrate by still more regulation. And this leads us to seek the best means to cultivate and foster the will-to-procreate. Regulation of the birthrate is the great trial by fire which every civilized nation will have to undergo in the near future. To shy from such regulation is to imitate the ostrich's policy, to bury one's head in the sand. It is much better to go about it in the right spirit. Chance parenthood due to ignorance is no longer to be relied upon. The two-children system is to be discarded under any circumstances.

The duty of the twentieth century is to satisfy with the minimum of sacrifice and expense the necessities of life which will increase the quality as well as the quantity of our population. The means adopted for the solution of the problem must be in full accord with the dictates of hygiene, with the dictates of the chemical and bacteriological laboratory.

ABORTIVE TREATMENT OF ACUTE GONORRHEAL EPIDIDYMITIS.*

BY OSCAR OWRE, M. D., Minneapolis.

IF we review the subject of acute gonorrheal epididymitis with the object of getting at some good reliable mode of treatment which will relieve the patient of his pain and quickly reduce the swelling and restore the swollen structure to its normal state, we shall come to the conclusion that, in spite of all the methods advocated, the end-result is, after all, one of expectancy.

Epididymitis is by far the most frequent of all the complications of acute gonorrhea in the male. According to J. Simonis it is said to occur in 27.5 per cent, and by Casper in 20 per cent, of all men suffering from gonorrhea. These percentages have, no doubt, been reduced considerably since the introduction of our newer silver salts and modern methods of treatment.

It may occur at any time during the disease, but more often

* Journal-Lancet.

at about the third week or when the disease is at its highest point of inflammation. Early instrumentation, physical strain, alcoholic debauch, coitus, too vigorous treatment, are factors which favor its development. It may be an exacerbation of a previous inflammatory process in the epididymis. Too vigorous massage of the prostate has been followed by epididymitis. Occasionally we cannot account for its onset.

The infectious material reaches the epididymis by way of the ductus ejaculatorius to the vas, and by the latter to the tail of the epididymis. Sometimes, however, the process begins in the tail or head of the organ without infection of the vas being manifest clinically. The gonorrheal virus is supposed to be carried by an antiperistaltic wave in the vas.

The inflammatory process gives rise to pain and swelling, fever, and ill-feeling. This usually begins in the tail, then spreads to the head, and finally, but not always, gives rise to fluid exudate or acute hydrocele, rarely to orchitis.

Often, without treatment, the inflammatory process reaches its height at about the fifth or sixth day, and then gradually subsides with more or less thickening and hard swelling in the tail or head of the epididymis. It is this hard nodular infiltration or swelling which, in a good percentage of cases, causes obstruction in the semen channel, and if bilateral may lead to complete sterility. The percentage of cases rendered sterile is difficult to ascertain. Benzler, 1898, says 63.5 per cent become sterile; others claim more or less. In unilateral cases there is of course not resultant sterility but a decided oligospermia.

Of the many methods of treatment, I shall mention a few. They are rest, diet, attention to bowels, careful treatment, suspensory bandage, etc., and prophylaxis is of course imperative. When the attack supervenes, the patient should be put to bed, and the testicles supported high, with hot or cold applications. Ice should not be applied, as it may cause gangrene, and it also favors the development of nodes. Heat is best applied by means of the various poultices. When the disease begins in the tail, a local application of pure guaiacol is often efficient; when in the entire epididymis, the same drug in lanoline, two drams to six drams of the latter being quite efficient to reduce the pain and swelling. Tucker advocates a saturated solution of magnesium sulphate applied as wet dressings for twenty-four to forty-eight hours.

The pains may be relieved, but the swelling goes on its way

until it has reached its maximum. Gradually the exudates become absorbed, and the organ returns slowly to nearly normal, but most often there remains the infiltration which the patient invariably calls our attention to, asking how long before that will disappear.

Some authors recommend multiple punctures. Haguer opens the tunica vaginalis at the junction of the testis and epididymis, and a drain is inserted. The results from this method are better than from the treatments detailed. The vaccines and serums have been used of late with some success. When a patient suffering with acute epididymitis presents himself for treatment, we lose time if we try to have autogenous vaccines prepared, and the stock vaccines may or may not be of value, at least such has been my experience in a considerable number treated by this method. Dr. Frank advises injections of fibrolysin and hot applications. Bier's hyperemia method has not met with approbation.

Dr. Ernest Finger in his discourse on sterility says that the best method to pursue is first to treat a case of acute epididymitis in such a manner as to guard against and prevent hard swellings and infiltrations. He warns us not to use ice applications, for these, while they may relieve the patient, always result in hard infiltration.

All these methods are most often gratifying to the patient, and they all get well in one sense of the word, but they are, *per se*, methods of expectancy, and there is an absolute uncertainty as to how much swelling or infiltration we are going to have left in this epididymis. It is this factor which has induced the writer to adopt a method of treatment which, above all other, seems to reach the ideal.

The method of treatment which I am to detail is the so-called colloidal therapy, or the injection of a colloidal silver preparation into the very substance of the acutely inflamed epididymis.

At first, however, it might be desirable, as well as interesting, to say a few words about colloids. Colloids, or colloidal metals, are suspensions of metallic particles in a liquid medium. These particles are minute beyond description, ultra-microscopic, and when viewed through a suitable prism are seen as brilliant points, animated by Brownian movements. By exact experimental methods it has been demonstrated that the surface of particles in one c. c. of colloidal gold may attain to a total of 600 square metres. These particles have a bactericidal property which is either due to a fermentation or is of a katalytic character, and having

the advantage of such immense contact surface, a small amount injected is capable of coming into contact with an immense diseased area and, theoretically, at least, ought to be of extreme value. Colloids are prepared by two methods, namely, the chemical and the electrical. As an example of the first, I might mention colargol, used extensively of late in cystitis and renal lavage with better results than all the newer preparations of silver. The electrical method has been shown to be more accurate than the chemical. It is a finer suspension and safer to use as an injection. In the preparation of electrargol, the silver is comminuted to the colloidal state by passing an electric spark from one silver plate to another in distilled water.*

This substance in its present state is highly unstable and when injected into an organism becomes immediately precipitated, owing to its contact with the so-called electrolytes, and as a result it loses its value as a therapeutic agent. Therefore, before it can be used it must be stabilized with a solution of a natural colloid of the same electric polarity. After this has been accomplished, it can be injected without the risk of precipitation. These suspensions of precious metals have been used for some years, especially by the French, and are decidedly gaining recognition as valuable agents in the treatment of various diseases, febrile and suppurative conditions.

The value of this agent as an abortive treatment in acute epididymitis was first called to the attention of the profession by an illuminating article by Dr. Paul Asch of Strassburg in the February, 1911, issue of the *Zeitschrift für Urologie*. He began his investigation by injecting the various silver salts into the tissue of the epididymis and was encouraged by far better results than with other methods of treatment. It was not until he used electrargol that the ideal results with a minimum amount of pain and complete *restitutio ad integrum* were obtained. After the drug is carefully isotonized, 15 to 30 drops are carefully injected into the epididymis by an exceedingly fine needle. The point of insertion is best sterilized by painting a small area with tincture of iodine. If the patient can remain in bed for a day it is better, the testicles being placed upon a shelf of adhesive plaster made by running a four or six-inch strap across both thighs anteriorly.

From a limited, yet surprisingly satisfactory, experience with this preparation in the treatment of acute gonorrheal epididymitis, I wish to report the following cases. I have also included the history and records of two cases treated by me at the City Hos-

* Annals Clin Laboratory.

pital and submit them in the words of Dr. W. J. Kremer, who was at the time senior interne.

CASE 1.—February 20, 1911. C. B., aged 24, able-bodied man; carpenter. His first attack of gonorrhea was one year ago. During the fifth week he had acute epididymitis on the left side. He was in bed six days. Has taken treatment at irregular intervals since this time, but still has the morning drop. Seven days before consulting me he had intercourse and four days later developed swelling and pain in the right epididymis.

Examination: Urine contained pus and shreds. There was very little discharge. Gonococcus present, swelling and extreme tenderness in tail of right epididymis. The left epididymis revealed a large, hard infiltration in the tail and head from the previous attack.

Treatment: Twenty drops of electrargol were injected into the inflamed tail of the epididymis, using a very fine needle. The scrotum was placed in a well-fitting suspensory. He had considerable pain for one and a half hours, but after this the pain ceased. The swollen structure returned to normal at the end of four days, and there was no swelling or induration as a result of the inflammatory process. He was treated for chronic gonorrhea for nine weeks. On May 7, 1911, obeying a previous request, he brought me a condom containing his ejaculatio seminis. In this I found great numbers of spermatozoa.

CASE 2.—March 1, 1911, E. H., aged 22.

History: Denies previous infection from venereal disease. February 10th he developed gonorrhea and was treated by daily injections of permanganate solution by a local physician. February 28th he developed acute epididymitis. On examination, he showed a small undescended testicle in the left groin. Right epididymis intensely swollen and painful. Thirty drops of electrargol injected into tail; 10 drops into head, the injection being encouraged to penetrate into mediastinum as much as possible. Patient complained of sharp lancinating pains for about 30 minutes, but was able to go from the office to his home. There was no further pain, and complete *restitutio ad integrum* was obtained in sixty hours.

CASE 3.—March 30, 1911, C. M., aged 31; traveling man. Chronic gonorrhea of two years' standing. Active gonorrheal epididymitis of left side following alcoholic debauch. Tail of epididymis enlarged to about the size of a man's little finger. In-

jected electrargol at 5 p. m. That night at 9 p. m. the pain entirely disappeared, and the parts returned to normal in 36 hours. Six days later, upon lifting some heavy bags, the condition returned in the head of the epididymis. Swelling and pain. A second injection of 25 drops was made in the head of the epididymis with brilliant results and no further recurrence.

CASE 4.—September 17, 1911. C. O. F., aged 22; single; traveling man. Had gonorrhea for nine weeks. Still some discharge. I was called to the hotel to see him, as he was in too weak a condition to walk. The left side of the scrotum presented a mass of inflammatory swelling as large as a good-sized fist. The scrotum was tense and glistening, and the mass was exceedingly sensitive and painful. Temperature, 103 degrees; pulse, 108. Duration of attack, three days. Some fluid was tapped from the acute hydrocele. The epididymis was injected with 60 drops electrargol, 30 into the head and 30 into the tail and mediastinum. Pain necessitated a hypodermic injection of morphine. Patient slept most of the night, and the swelling was reduced to normal in about five days with no induration.

Dr. Kremer's two reports are as follows:

CASE 1.—H. M., aged 37; engineer; married; wife and two children. He had gonorrheal urethritis two years ago, and treated himself. There were frequent exacerbations associated with frequent and burning urination. One week ago, after lifting heavily, he began to have pain in the left testicle, followed by swelling. Condition became worse, and two days ago he had to quit his work on account of the pain and discomfort. Was at home two days without improvement. Comes to hospital for treatment.

Examination: Left epididymis is swollen and hardened; scrotum, edematous and tense; cord infiltrated, enlarged, and tender.

Treatment: Twelve drops electrargol injected into both head and tail of epididymis at 1 p. m. Pain continued for about an hour, when it began to disappear. At 6 p. m. the pain had entirely disappeared and the swelling was greatly reduced. Left hospital at 9 p. m.

NOTE.—Patient had entered hospital to remain an indefinite period; however, at 9 p. m. on the same day that he had entered the hospital, he begged to be allowed to go home, that he might return to his work in the morning.

CASE 2.—C. G., aged 22; elevator operator; single. He had gonorrheal urethritis five weeks ago, and treated himself. Two

weeks after the onset, epididymitis developed in the right side. The patient was in bed six days, when the swelling and pain began to disappear. Two days later the left epididymis became involved. Was in bed one day and then up and around for about a week, when the pain became so severe that he was forced to stay in bed. After remaining in bed two days without improvement, he came to the hospital.

Examination: Undescended testicle palpable in the right inguinal canal. Left epididymis readily felt as a hardened crescentic swelling overlapping the testicle. Scrotum was red, edematous-looking, and tense. There was extreme pain and tenderness.

In the majority of the cases which I have treated with this method, now 16 in all, a single injection will successfully abort the condition, if it can be made early. In those of longer standing, say three to four days or more, it becomes necessary to make a second and, rarely, a third injection. It cuts short the duration of the disease and will bring the swollen organ back to its normal state, that is, without thickenings or infiltrations, more rapidly and by far more efficiently than any other method so far advocated, with the possible exception of Hagner's operation, which, as we know, requires general anesthesia and is a formidable operative procedure.

Treatment: Fifteen drops electrargol injected into epididymis at 5:30 p. m. At 7 p. m. the patient felt so much relieved that he asked to be allowed to go home. Next morning the pain had entirely disappeared, and the swelling was so much relieved that the scrotum could be picked up between the fingers and folded over the testicle. He left the hospital that day, apparently well.

NOTE.—To the present date I have not made use of this agent in any other condition than gonorrheal epididymitis, but it seems to me quite reasonable to believe that it may possess a field of usefulness in gonorrheal joint-affections, namely, the arthritic type where there is involvement of the joint synovia proper and the articular ends of the bone. In the osteoarthritic type the diseased foci would of course have to be located by means of the radiograph. Then it would depend upon the skill of the surgeon as to whether he would be able to inject and impregnate the diseased areas of rarefaction with the preparation.

THE OVERRATED IMPORTANCE OF SEXUALITY.

BY DR. E. WEXBERG, Vienna.

IN the discussion of sexual matters we should avoid the use of such words as urge or libido, much misunderstood by both physicians and patients, and which explains nothing. We can discuss hunger without dragging in any fictitious "hunger urge", and yet, biologically, the consumption of food, necessary to maintain life, should be regulated by a more constant urge than sexuality, which to a certain extent is only a luxury. Sexuality does not explain abnormalities; on the contrary, whenever a sexual phenomenon presents something unusual, sexuality as such should be disregarded as a factor; for there is always some non-sexual factor playing a part in the psychology of a case; the best a study of sexuality can do is to throw some light upon the physiological impulses.

The reproduction of the species is not the most important motive of sexual actions; the next motive to be mentioned is physical gratification; and many Freudians are trying to identify libido and sexuality. If gratification is the main object of sexuality how can we explain the infinite variations of sexual life we observe nowadays, sexual aberrations and neurotic variations? For instance the difference between masturbation and coitus is not merely a difference in the amount of pleasure. The difference is psychological. In order to solve this problem Freud assumed the existence of a sort of "antisexuality" or repression which is a concomitant of civilization. The various sexual differences would then oscillate between the two poles libido and repression.

In the act of gratification, however, there is more than a mere physiological fact; truly enough, animals and primitive races are led by the sexual need which subsides as soon as it is gratified; but at a higher stage of civilization individual differences become more marked. The need is there still, but man uses it according to his preferences and mental tendencies. If a woman proves to be frigid, to explain her condition by "frigidity" would be begging the question, it is probable that her attitude to sex from childhood has brought about in her a condition which precludes the possibility of her enjoying intercourse. Likewise the attitude of a syphilophobiac is simply mental; to try to cure him by recommending to him safe preservatives would be a waste of time. We must then devote much attention to the role played by the psychological element.

From the first years of his life the child desires to dominate; he soon notices that man's position is superior to woman's and his first desire is "to be a man". When the child acquires sexual knowledge his first question to himself is: Am I a man? Manhood and sex become synonymous to him. Masturbation becomes to him evidence of his manhood. And we observe that many weaklings, adults that have remained children, have recourse to masturbation every time they meet with disappointment or humiliation. It plays with them the role of a consolation.

We should expect an entirely different attitude in girls. But they too would like to dominate and some of them refuse to be reconciled to the fact of being women; they feel that sex is the weak point of their personality; they struggle against it and thus we find the frigid type.

At the same time when man has to take into account specific sexual functions, there may crop up in him the fear of not being equal to the task. Here again the fear of impotence is the fear of failure. Then several forms of neurosis are observable. Neurotics are afraid of women. Some become rabid antifeminists and stand for the oriental treatment of women; some place woman on a pedestal and consider every woman a Virgin Mary; there is the Don Juan type that conquers woman after woman for fear of being conquered by one; another type takes refuge against sexual perils in matrimony and avenges himself on woman through his impotence.

The neurotic woman strives for equality with man; and she often joins man in his scorn of woman. Whenever woman stands against woman, both sides adopt the man view. But sentimental dialectic sometimes leads both man and woman to scorn manhood; man gives up a role for which he doesn't feel himself adapted. A woman who has failed in her ambitions may place a ban on sexuality. Her struggle against man is a struggle against sexuality. Fear of matrimony translates itself either into frigidity or, if she happens to adopt the man standard, into sensuality verging on nymphomania.

Man himself may at times show the most violent hostility against sexuality. And he will exaggerate his sexuality to the point of blaming it for all his shortcomings. He will exaggerate the consequences of masturbation so as to find an excuse in his indulgence for every one of his weaknesses.

Fetichism, homosexuality, sadism, masochism are in one form

or other an expression of the fear of woman, of scorn towards her or hostility to her. They cannot be explained except as symptoms of a certain personality. For man carries out in his sexual life the psychological conflicts which characterize his whole life.

Let us beware of overestimating the importance of sex. The materialistic direction which science is assuming now more than ever before enables neurotics to blame fate for all their vices and weaknesses. Once upon a time the psychotherapists tried to correct certain mental defects; now we speak of heredity, germinal injury, weak moral sense. The humanity of modern science sentences the patient to incurability.

Physiological conditions can, in certain cases, influence the development of psychosexuality and certain physical defects have a deep influence on the formation of character. That a status thymicus-lymphaticus predisposes the subject to neurosis is a clinical and anatomical axiom. But it is perhaps the only physiological factor which would enable us to establish an etiological connection between sexuality and neurosis.

It is not the patient's sexuality but his attitude to sexual questions which is the main factor to be considered, and which can be utilized in making a diagnosis. The sexual organs are simply tools of the personality that uses them.

We have no right to isolate our sexuality and be satisfied with calling an action a "sexual action;" we might just as well ascribe to our hand automatic impulses which our will is not able to control.

Translated for THE AMERICAN JOURNAL OF UROLOGY AND SEXOLOGY.

PORNOGRAPHY.

BY PROFESSOR BRUNO MEYER, Berlin.

I wish to repeat at the beginning of this article a statement I have made many times and which seems to have attracted no attention whatever in spite of the fact that it hits the nail squarely on the head.

When some good sport after indulging in copious libations lets loose his store of juicy anecdotes till the tableful bursts into uproarious laughter the penal code and the courts take no notice of the incident. Let him, however, jot down his stories, reproduce them in some form and then distribute them to his boon companions, and he will be "in for it."

Such an illogical attitude is indefensible from any point of view whatever; what should be done to accord both cases uniform treatment, what rule should be followed in both cases to eschew the charge of childish thoughtlessness, is perfectly obvious.

One might ask the following question: How is it that even men of the most cultured and refined type will suddenly evince a craving for ribald pleasantries on sexual subjects, overlook for the time being all the limits of decency and properly wallow in the most unadorned facts of nature? On such occasions we see people who otherwise would always command our deepest respect join heartily and unreservedly in this form of merrymaking.

An earnest and profound thinker like Christian von Ehrenfels sees in this an evidence of the failure of our present sexual ethics. I do not deny that such a statement contains a great measure of truth. But I think that the real psychological connection between the facts has been lost sight of.

That tendency to cynicism, that revelling in indecency, what Ehrenfels calls "the enjoyment of the swinish" is due to the fact that in the exercise of his sexual functions man is not, like the animal, the willess tool of an unreasoning instinct, but meditates as much about the incidents of his sexual life as he does about everything that concerns him and affects him.

The domination of that instinct is in many respects, however, something rather depressing, for it is really humiliating to seek one's gratification or to miss it terribly, when there is no "regular" means of satisfaction at hand; and therefore a very natural reaction takes place against that instinct and we make light of the master that tyrannizes over us.

Whether we show more refinement or more vulgarity in that reaction and resort to witty allusions or to thoroughly coarse jokes makes very little difference and it is very difficult to draw the line anywhere in particular.

We know, however, that in all ages men and even the greatest of them have derived pleasure from that sort of thing. If my memory serves me well I think I read somewhere that Bismarck would now and then feel the need of reading some risky novel in order to relieve the stress of his mind continually applied to one subject.

We know that certain passages of Goethe's "Tagebuch" and of his "Faust" not only border on the obscene but greatly overstep the bounds of decency.

Poets and prose writers of all times who gained a world-wide fame as cynics or erotic writers, Aristophanes, Martial, Ovid, Boccaccio and Machiavelli, to only cite the first names I can think of, prove my point conclusively.

The only correct attitude to assume toward that sort of thing is to treat it like the very matter to which it refers, that is one should exclude it severely from the public intercourse of polite society but not attempt to drive it out of existence.

We should not even try to suppress the worst excesses in that line for the boundary line that divides art from vulgarity can never be determined easily in real life, not even by a man like Goethe. Furthermore, the interest in those things even in the highest literary and artistic circles is a very material one, and is also a means of gratification for people who try to gratify more or less exclusively the material need with or without "a high interest in art of science."

We should treat pornography as we treat prostitution with which it has many relations and a certain similarity. Both should be considered as necessary evils, due to the insuperable weakness of human nature; neither can be successfully dealt with by violence and tyrannical repression, but by developing man's intellectual and ethical education, not to forget his esthetic education, so that the demand and supply for the obscene decrease simultaneously.

The more pompous the attitude we take in this matter, the more ridiculous the fight against the windmills appears, in the course of which the fighters fare as badly as the defunct knight of La Mancha.

Besides the damage they occasion and which from a human point of view is deplorable, such unintelligent attempts to suppress obscenity have a very unpleasant result; they make their victims an object of interest and sympathy and they attract the public's attention to subjects which should be mentioned as seldom as possible.

But talking of those things is fun, a fun which we must do without in other places where it would be even nicer. . . . Let's stop crying over it. . . . The people who enjoy those things (as far as they go) are at least more honest than those who raise a rumpus about them.

THE EUGENIC SIGNIFICANCE OF THE ORGASM.*

DR. M. VAERTING.

IN general orgasm means the voluptuous sensation brought about by coitus. In the following discussion it is important to remember that orgasm is not necessarily an accompaniment of sexual intercourse, but may not occur at all with normal intercourse. This possibility is entirely different in as regards the man or the woman.

In the case of the man a certain amount of sexual excitement is necessary for the act, otherwise the erection is lacking and there is a failure of ejaculation which is always present in his case with every normal sexual act. The orgasm coincides with ejaculation. Complete absence of sensation is therefore unthinkable in the man's case, at most the voluptuous sensation may be diminished. In the case of the woman the act may be completed in the normal manner without any excitement on her part whatever. In other words orgasm is an essential accompaniment in the case of the man, tho the degree may vary, whereas, in the woman's case it is merely a possible accompaniment. Hence dyspareunia, lack of voluptuous sensation in coitu¹, is classed as one of the sexual diseases of the female.

The consummation of orgasm which is indicated in the case of the male by the ejaculation is characterized in the case of the female by the uterine reflex which ejects the **mucous plug from the cervix**. (1) Thus while in the case of the man the ejaculation and the coincident orgasm must be present at every normal coitus, a faulty development of the woman's sexual excitement may prevent it occurring at all in her case. Since however the absence of orgasm in the woman involves the absence of the uterine reflex, with the coincident expulsion of the utero-cervical mucous plug, such absence is a more serious matter in the biologic-eugenic aspect of the matter.

The relation of these physiological processes of the orgasm to the actual fertilization is in its outlines well understood. But we have not considered hitherto the question of the importance of these uterine mechanisms for the most favorable conditions of fertilization in its relation to eugenics.

In order to show the influence of the orgasm on the course of

* Z. Sexualwissenschaft. II. 185, 1915.

¹ Dyspareunia is not merely *lack* of voluptuousness; it is a disagreeable painful sensation, in woman, during coitus. W. J. R.

the fertilizing process we may briefly sketch the known facts regarding orgasm and conception. Kish (2) calls attention to the folk tradition that an orgasm in the woman was essential to conception and that in its absence conception was hindered or prevented. He adds a number of cases and says: "In fact the coincidence of dyspareunia and sterility is so striking that I must accept an etiologic relation at least in a number of cases." Kish (3) investigated 69 cases of sterility and found that 38 percent of them showed faulty development of voluptuousness. Duncan (4) found 31 percent of such cases. Eulenberg (5) says: "Anaphrodisia (lack of desire or inability to experience orgasm) is a common cause of sterility. This is readily understood when we recall the important role which a more active participation on the woman's part due to excitement plays in the conditions of fertilization. While we can not go as far as some authors who hold that conception is impossible where the woman is entirely passive, it is nevertheless probable that the absence of these reflexes render more difficult the passage of the spermatozoa into the uterus and may entirely prevent fertilization."

Rohleder (6) says: "I believe that aside from azoospermia resulting from bilateral epididymitis, no other factor is so often responsible for childlessness as faulty voluptuousness. If azoospermia is the most frequent cause of male sterility, surely dyspareunia is the most common cause where the woman is affected." The case of Maria Theresa tends to confirm this probable relation between orgasm and conception.

If one considers the sexual apparatus one sees that each and every part of it is concerned with aiding fertilization. While the whole process is not clear we may safely assume the following processes to accompany orgasm (7). There is a peristaltic contraction of the vagina which holds the mass of semen against the mouth of the uterus, as well as strong movements tending to press the semen into the uterus. In these peristaltic contractions not only the vagina, the cervix and the lower part of the uterus but also the entire uterus is apparently involved. The uterus during strong excitement, and assisted by the abdominal pressure, rises further into the pelvis, the mouth of the womb sinks lower, is opened by the uterine muscles, and ejaculates a small amount of secretion from the cervix. At the same time a sucking action is induced in the slightly opened mouth of the uterus, which results in the introduction of some semen into the uterus. Rohleder (loc.

cit.) is of the opinion that this aspiration is the more powerful the greater the sexual excitement. In addition to this assistance must be added the action of the ciliated epithelium of the cervical canal. Summarizing the chief results of the voluptuous sensations we may note that they cause: 1. The contractions of the vagina; 2. Reflex uterine activity with the corresponding aspirating action; 3. The mucous plug; 4. The activity of the ciliated epithelium; 5. An increased temperature of the entire genital apparatus.

The purpose of these processes is not solely the mere making possible of fertilization. Their nature indicates a double advantage. First the spermatozoa are assisted to get into the uterus and immediately after ejaculation. Secondly the sperm is enabled to reach the ovum with the least possible effort. The whole process has as its purpose: *The combination of the sperm with the ovum as soon after ejaculation as possible, and what is of the greatest significance, with the least possible expenditure of its own energy.*

We may now take up the significance of this process for eugenics.

In normal coitus the penis empties the semen at the mouth of the uterus or thereabouts. The cervical plug here assists since it has an alkaline reaction. The remaining semen is destroyed by the acid reaction of the vagina. This sperm-destroying action of the vagina makes certain that those spermatozoa which have a long journey to travel in order to reach the uterus shall not take part in the fertilizing process. Only those deposited near the mouth of the uterus have any chance to reach the ovum, they having the shortest distance to go, and as will be shown later this factor is a significant advantage for the resulting combination. Also the vaginal destructiveness has the further purpose of preventing the less healthy spermatozoa from fertilizing. Since in case of sexual weakness and where the probability is that the spermatozoa also are unhealthy, there is a reasonable certainty that the spermatozoa instead of being deposited at the mouth of the uterus, will be deposited lower in the vagina and destroyed. This eugenically favorable action is furthered by the circumstance that such men can not as a rule arouse any great amount of sexual excitement in the woman so that the favoring action of the cervical plug is also lacking.

The distance which the sperm must travel in order to reach

the egg can be accomplished on its own energy, since every spermatozoon is mechanically so constructed as to be able to work its way to the ovum and combine. (Waldeyer, 8.) This however is a distinct disadvantage to the sperm and consequently to the product, and for this reason:

The entire energy expended by the spermatozoon must be taken from its own stock of cellular energy, without the possibility of renewing it, since after the ejaculation the spermatozoa are separated from the semen in which they lived. Thus the spermatozoon is without nourishment during the time between ejaculation and amphimixis. The female genitals in so far as they are rendered alkaline by the cervical plug allow the sperm to exist, but only for a relatively short time because of lack of nourishment. Thus the sperm starves to death after a few hours or days in the female genitals. Of itself the semen is reasonably tenacious of life so that the sperms live almost as well outside the female genitals as within. Kisch (9) says: that a good healthy semen if properly protected from light and cold will show active spermatozoa twenty four hours later, or longer. Thus the sperms live no longer inside the genitals than outside, because of failure of nourishment.*

During this time when nourishment is lacking, the sperms must travel a distance which in proportion to their size is extremely great in order to reach the ovum. For doing this work the sperms must rely upon the energy contained within themselves, without the possibility of renewing it. The energy loss of the cell between ejaculation and amphimixis will be the greater, the greater the distance it has to travel. The less the assistance resulting from the female activity, the greater expenditure must the sperm make in overcoming the distance. The longer the time between ejaculation and amphimixis the sperm being without nourishment.

Iwan Bloch (10) has already called attention to this fact. "With the progressive evolution of the many-celled organisms and the corresponding differentiation of various parts of the body it became necessary to develop new and more certain methods of reproduction than the original process of fission. This became the more necessary since, with the specialization of the other organs, the originally self-sufficient reproductive cells became more and more dependent on the rest of the organism for nourishment. It became necessary to shorten as much as possible the time between

* Sperms (in the plural) is used interchangeably with spermatozoa; sperm (in the singular)—with semen.

the separation of the reproductive cell from the parent and its combination to form a new individual. This is accomplished by the development of apparatus which insures a certain and rapid union of the sex cells." Therefore the greater the energy loss of the sperm in its journey to fertilize the ovum, the weaker it will be when it arrives. The eugenic advantages of an intense orgasm which throws the whole uterine mechanism into action should be obvious. The path of the sperm is much shortened by being sucked up into the cervical canal. The activities of the sperm are greatly assisted by the cervical plug, the motion of the ciliated epithelium, and the increased temperature of the genital apparatus. Wernich is even of the opinion that the cervical plug itself is at a higher temperature, which increases its favorable action on the sperm. All of these processes serve to assist the forward movement of the sperm and to diminish the intervening time between ejaculation and amphi-mixis with a correspondingly smaller loss of energy to the sperm itself.

The more intense the assisting action of the female genitals, the more vigorous will be the sperm at conception and the more satisfactory the resulting product. First, because the more vigorous the sperm, the better for the resulting product. Secondly because a weakened cell will be less able to carry through the conjugating process. The physiological phenomena of orgasm may also serve to prevent injury to the spermatozoa. According to Orth (11) changes may occur in the sperm in the time between ejaculation and conception. In agreement with this Hensen (12) states that during the movement of the spermatozoon a change was observed in the shape of the head as well as when it was entering the egg. Grohe (13) was of the opinion that a contraction of the head was essential to the movement of the sperm. His observations were evidently made on spermatozoa which were wholly dependent on their own energy for their motion. It is quite possible that through exhaustion the cell may degenerate and that this would be first visible in the headpiece. Since the headpiece is the bearer of heredity, a degenerative change there would be of pathological effect on the product of conception. It seems not improbable therefore, that the entire absence of orgasm at the time of insemination may be a cause of pathological phenomena in the offspring.

A confirmation of this proposition may be seen in the following: The repeated bearing of children is not without its influence on the genital organs of the woman, and it is precisely those organs

which are concerned with the sperm-expediting activity of orgasm which suffer most. The glands of the cervix undergo a cystic degeneration. Rohleder states that after several births the cylindrical epithelium of the cervix is replaced by the ordinary flat cells. At the lower end of the plicae palmatae papillae begin to form and after many deliveries the cylindrical epithelium is replaced by the flat variety from the mouth of the womb as far as half way up the cervix, which renders conception more difficult." Thus after several births the woman is no longer able to expedite the semen unweakened into the neighborhood of the ovum. Thus after numerous deliveries the sperm is more and more dependent on its own exertions to bring itself in contact with the ovum, so that conception occurs with much weakened sperms to which cause we may attribute the inferior quality of the resulting product. If this assumption is correct we should expect to find that the later children were less able and that the disability might proceed as far as degeneration. This diminished quality of the later offspring has already been established. It has been observed that *after the fifth to seventh child there is a distinct decrease not only in the physical but also in the mental capability of the children*. There are many data as to the increase in morbidity and mortality with increasing numbers of births. Geissler and Gruber observed that after the fifth child there was a decrease in the vitality of the children; Bluhm and v. d. Velden, from the seventh; Brehmer and Pippingsköld found that with the seventh and often with the fifth there was a diminished productive capacity of the parents and a greater sensitiveness to tuberculosis. As to talent, geniuses are usually among the first four children and only exceptionally of later order of birth. In Marr's list of the pupils in the Hamburg Hilfsschule he found that all the pupils were later in order than the fifth child. Römer in his study of Uranismus found that the perverse child was usually the last. It appears therefore that with increasing numbers of births there is a steady deterioration in the bodily and mental quality even as far as pathological developments. It need hardly be mentioned that the number of births is not the only factor involved. The injurious effect of advanced age of the father is well established.

After all, one can no longer doubt that the sperm-assisting action of orgasm in the woman is of very great importance to the quality of the offspring. A physician who is aware of racial biology and eugenics must feel bound to disapprove any methods

of conception which omit the production of orgasm in woman. We may refer to some of these. Thus we may properly disapprove of all conception later than the fifth. Even should orgasm occur the changes in the female organs are so great that they can not but exercise a deleterious influence on the offspring. Women must not marry too young. It has been fully established by sexologists that most young wives are in the beginning of their married life frigid. The cause of this is a too early marriage. Women often marry at a time when their sex impulse still slumbers and feels no desire for exercise. The danger of conception without orgasm is particularly great as regards the first child. Herein lies the explanation of the fact that the first born is seldom as capable as the later children. This last fact has been established by Pearson, and Heron. In agreement with this Groth showed that prior to the twenty fifth year conception is less readily brought about, as far as concerns the woman.

Furthermore, only those men have a right to fatherhood who are able to induce in the woman the highest degree of voluptuous sensation. On account of frequent change of female partners, through bought love or sexual excesses, masturbation or increasing years, the man's power in this direction is diminished. Such a man even if able to perform a normal coitus should if possible not be allowed to become a father, since an inferior father can only beget an inferior child.

For similar reasons artificial insemination must be regarded as undesirable, since orgasm does not occur and also there is an appreciable loss of time between ejaculation and amphimixis.

Rohleder offers some substitutes for the lack of orgasm in artificial fertilization. 1. The wife must be brought to as high a pitch of excitement as possible. 2. Injection of the sperm within the first two days after menstruation. 3. The end of the syringe to be inserted within the cervix. For obvious reasons the first suggestion seems little apt to succeed. Our present knowledge does not permit a conclusion as to the value of the second. The third suggestion offers certain advantages, though we must admit that the absence of cervical secretion, epithelial activity and lower temperature of the genitals are disadvantageous. In every case there must be a distinct weakening of the sperms and since this weakening can not be compensated we must regard artificial fertilization as a crime against eugenics.

The recognition of the eugenic value of orgasm answers an

ancient discussion, that is, as to the effect of love on the quality of the offspring. Some insist that it is without effect while others attach much importance to it. Although these views are contradictory, there is some truth in both. *Love between the sexes being both physical and spiritual a complete harmony of both is the ideal. The spiritual is without direct action on the offspring while the physical is of the greatest importance, since it determines the degree of sexual excitement and therefore the power of the orgasm induced. Physical love is of the greatest import to both sexes, since it enables the man to fulfill his function of inducing the maximum of voluptuous sensation in the woman. Only the strongest sensual love will enable the man to meet this requirement.*

It has been customary with many people to give the first-born precedence, apparently merely because of his being first. There is a biological justification of this in that the first born are the more apt to be love-children. But this probability occurs only when the parents at a suitable age come first together. Since this condition seldom obtains in the majority we, nowadays, find the firstborn as often a curse as a blessing.

The eugenic significance of orgasm also explains the different course which orgasm takes in the two sexes. Most sexologists agree that orgasm is more tardily achieved in the case of the woman than in the case of the man, and that it lasts longer. The eugenic advantage is obvious. In man the maximum is reached at ejaculation after which he has no further influence on the seed. Here the slower and more extended phenomena of the woman assist the course of the sperm over an appreciable time. There is another advantage in that the slower passing of the phenomenon increases the blood supply to the sex organs. The more slowly this increased blood supply is withdrawn the more easily is the fertilized egg nourished. The nourishment of the ovum through the first few hours is more important for the future of the offspring than as many months at a later period.

It is well known that the female throws obstacles in the way of a too speedy union. This form of love-play is usually regarded as due to a feeling of shame. It is merely Nature's way of providing that the sexual excitement shall reach such a degree that orgasm will surely occur with the corresponding eugenic advantage to the offspring. There is the further reason that in order that the advantage of a slowly diminishing excitement, with its advantageous effects on the early nourishment of the ovum, may occur,

there is required an equally prolonged period of preparation. Every rapid union without the preliminary love-play on the part of the man leaves the woman cold. Through her coquettishness the woman gains the necessary time to reach that degree of excitement which is so necessary and advantageous to the offspring.

1. Die Zeugung beim Menschen.
2. Das Geschlechtsleben des Weibes.
3. Die Sterilität des Weibes.
4. Die Sterilität der Frauen.
5. Sexuele Neuropathie.
6. loc. cit.
7. loc. cit.
8. Geschlechtszellen. Handbuch der Entwicklungslehre, Hertwig.
9. loc. cit.
10. Das Sexualleben unserer Zeit.
11. Über die Vererbung individ. Eigenschaften. Kölliker's Festschrift.
12. Physiologie der Zeugung.
13. Archiv für pathologische Anatomie, 1865.